Evolution XLC-M
Line Card

The Evolution XLC-M line card features multi-channel demodulation for inbound traffic in Adaptive TDMA or SCPC Return mode. The XLC-M line card supports an extremely efficient inbound FEC with 2D 16-State coding. Coupled with an Evolution modulator card such as XLC-11 it is ideal for networks featuring one large outbound and multiple inbounds supporting voice, data and video applications.

Network Configuration

Modem	Multiple demodulators (subject to software version and license)	
	ATDMA	SCPC Return
Channels	M=1, 4, 8 or 16*	M=1 or 8*
Modulation	BPSK, QPSK, 8PSK	BPSK, QPSK, 8PSK
FEC	2D 16-State, TPC** (M=1 only)	2D 16-State
Symbol Rates	Single Channel Mode (M=1): Up to 7.5 Msps Multi Channel Mode (M=4, 8): Up to 5.875 Msps Multi Channel Mode (M=16): Up to 468 ksps Up to 7.5 Msps aggregate symbol rate	Multi Channel Mode (M=1, 8): Up to 11.75 Msps Up to 40 Mbps aggregate carrier info rate
Max Info Rate	M=1: 19.2 Mbps[1] M=1: 16 Mbps[1]	M=1: 30.2 Mbps[2]
Max IP Data Rate		M=1: 19.3 Mbps[2]
	Notes: [1]8PSK, 438 6/7 FEC, Single Channel Demod	[2]8PSK, 438 6/7
Interoperability	Compatible with Series 15000 Universal Hub chassis and Series 12000 Universal Hub Compatible with Evolution Series remotes and linecards in multi-channel mode Compatible with Evolution and iNFINITI Series remotes and line cards in single channel mode Requires iDX 3.1 software or above for 16-channel narrowband license Requires iDX 3.0 software or above in multi-channel mode and SCPC Return Requires iDX 2.0 software or above in single channel mode	

Interfaces

SatCom Interfaces* **	RxIF: Type-F, 950–2000 MHz, -5dBm (max) composite, -130+10*log(Fsym)dBm (min) single carrier
Data Interfaces	LAN: RJ-45; Two 100/1000Base-T, one 10/100Base-T; RS-232: RJ-45 (console connection)

Mechanical/Environmental

Redundancy	Hot-Swappable Software controlled Auto-Failover by cards licensed for equal or greater number of channels, up to M=8. M=16 can only failover to another M=16 line card.
Weight	~1.2 lbs (0.6 Kg)
Operating Temperature	0° to +45°C (+32° to +113°F)
Radio Standards (System Level)	EN 301-428 v1.3.1 — Ku-Band System Level Specification EN 301-443 v1.3.1 — C-Band System Level Specification
Safety Standard (System Level)	Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03
Emission Standard (System Level)	Complies with EN 55022 Class A, FCC Part 15 Class A, CISPR 22 Class A, EN 61000-3-2, EN 61000-3-3
EMC/Immunity Standard (System Level)	Complies with EN 55024, EN 301-489-1, EN 301-489-12, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 EN 61000-4-5, EN 61000-4-6, EN 61000-4-11
Certification	FCC, CE, and RoHS Compliant

* All carriers within 36 MHz IF bandwidth

** TPC not supported for use with DVB-S2 outbound in iDX 3.0 and above

*** Evolution 3.3 and above (prior to Evolution 3.3, RxIF = 950-1700 MHz)

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